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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/768,962   | 01/30/2004  | Vivek Nautiyal       | 02-IND-139             | 4549             |
| 23990  | 7590        | 05/25/2005           | EXAMINER               |                  |
| DOCKET CLERK<br>P.O. DRAWER 800889<br>DALLAS, TX 75380 |             |                      | ZWEIZIG, JEFFERY SHAWN |                  |
|  |             |                      | ART UNIT               | PAPER NUMBER     |
|  |             |                      | 2816                   |                  |
| DATE MAILED: 05/25/2005                                |             |                      |                        |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/768,962

Applicant(s)

NAUTIYAL ET AL.

Examiner

Jeffrey S. Zweizig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3, 5, 9, 11, 15, 17 and 20 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 7 and 13 define signal lines and sources. Referring to Applicants' Fig. 5, insofar as understood, the source is 502. The signal line is 507. These are two separate and distinct circuit points, however, some dependent claims appear to intermix the terms.

In claim 3 line 3, "signal lines" should be --sources--.

Also in claim 3, the output of the tri-state driver circuit (505) is the signal line (507).

In claim 3 line 8, "signal line" should be --source--.

In claim 5 line 2, "signal line" should be --source--.

In claim 5 line 5, "signal line" should be --source--.

In claim 9 line 3, "signal lines" should be --sources--.

Also in claim 9, the output of the tri-state driver circuit (505) is the signal line (507).

In claim 9 line 8, "signal line" should be --source--.

In claim 11 lines 2 & 3, "signal line" should be --source--.

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In claim 11 line 5, "signal line" should be --source--.

In claim 15 line 2, "signal line" should be --source--.

In claim 17 line 2, "signal line" should be --source--.

In claim 17 line 2, "signal" should be --source--.

In claim 20, the output of the tri-state driver circuit (505) is the signal line (507).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-10 and 12-20 remain rejected under 35 U.S.C. 102(b) as being anticipated by Prater (USPN 5,574,633).

Figs. 2 and 3 disclose a plurality of signal lines n12, an intermediate floating virtual source/sink 36, a plurality of sources 40 and a charge redistribution circuit (n30, n14 & all of Fig. 3) as recited in claim 1. Component 48 generates the recited idle period.

Line 36 is seen as a charge storage element, a capacitor or a floating conductor as recited in claims 2, 4 and 6.

As best understood, Fig. 3 is the recited transition detector including tri-state drives 56/58 and control switch 54/n30 as recited in claim 3.

As best understood, Fig. 3 further shows a delay circuit 48 and an XOR gate 50 as recited in claim 5.

Claims 7-10 and 12-20 are anticipated for the reasons above.

### ***Response to Arguments***

5. Referring to the 112 rejection, Applicants argue that a person skilled in the art could easily identify the scope of these claims and have no particular difficulty in determining whether the recited feature has been implemented. Examiner considers himself a person skilled in the art and is having difficulty. Applicants point to the spec at paragraphs 35, 36 and 42. The spec is equally confusing.

Refer again to Fig. 5, circuit points 502 and 507 are different circuit points. They both cannot be defined as the source. They both cannot be the signal line. According to claim 1, the charge redistribution circuit isolates the signal line from its source. The charge redistribution circuit is 501/505/506. The charge redistribution circuit isolates circuit point 507 from circuit point 502. Therefore, it would be logical to define point 507 as the signal line and point 502 as the source. The charge redistribution circuit (see 506) also connects the signal line to the floating source/sink. That is, switch 506 connects 507 to 509. Again it would be logical to define 507 as the signal line, which leaves 502 to be defined as the source. Once again 502 and 507 are not the same circuit point and cannot be defined by the same term. Also for future reference, the drawings can be substantially less confusing if the same components retain the same reference numbers from one figure to the next.

The amendments to the claims are not seen to material change their scope as far as the Prater reference has been applied above. Applicants argue the Prater does not disclose tri-state drivers. As pointed out in the rejection above, components 56 and 58 are the tri-state drivers since they turn OFF both transistors n25 and n27 during the "idle period". When both transistors n25 and n27 are OFF, the signal line n12 is in a high impedance state (or tri-state) and is isolated from source 40.

Upon further consideration, the 102 rejections to claims 5 and 11 are withdrawn since Prater shows only a lone connection from the output of the transition detector 48 to XOR gate 50.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Zweizig whose telephone number is (571) 272-1758. The examiner can normally be reached on Monday thru Thursday 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeffrey S. Zweizig  
Primary Examiner  
Art Unit 2816

JZ